

ABSTRACT

An interconnect for testing semiconductor components includes a substrate, and contacts on the substrate for making temporary electrical connections with bumped contacts on the components. Each contact includes a recess and a support member over the recess configured to electrically engage a bumped contact. The support member is suspended over the recess on spiral leads formed on a surface of the substrate. The spiral leads allow the support member to move in a z-direction within the recess to accommodate variations in the height and planarity of the bumped contacts. In addition, the spiral leads twist the support member relative to the bumped contact to facilitate penetration of oxide layers thereon. The spiral leads can be formed by attaching a polymer substrate with the leads thereon to the substrate, or by forming a patterned metal layer on the substrate. In an alternate embodiment contact, the support member is suspended over the surface of the substrate on raised spring segment leads.

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